Patent claims

1. Method for transmitting text- and/or binary information (short message) in addition to voice information for a talker (if present) and at least one listener of a Voice Group Call, characterised by sending a special, dedicated signal to all listeners and to the talker.

2. Method according to claim 1, characterized in that the message is sent in unacknowledged mode.

3. Method according to claim 1 or 2, characterized in that the special dedicated signal is a short message mobile terminated SM MT.

4. Method according to any of claims 1-3, characterized in that the SM follows the structure of a regular PtP-SMS in parallel to an ongoing PtP-voice- or PtP-cs-data-call.

5. Method according to any of claims 1-4, characterized in that the SM is send from the current talker to the network in form of a short message mobile originated SM MO.

6. Method according to claim 5, characterized in that the SM MO is sent in acknowledged mode.

7. Method according to any of claims 1-6, characterized in that the SM will be addressed by an associated Voice Group Call reference.

8. Method according to any of claims 1-7, characterized in that if the current talker is sending a SM and during the sending the talker intends to end his speaking, the MS will hold the uplink until the SM is sent completely to the network.

9. Method according to any of claims 1-8, characterized in that a SME in the network requests the SC to send a SM to the members of a VGC, the SC interrogates the GCR in order to retrieve the routing information of an Anchor-MSC for this VGC, the SC forwards the SM to the appointed Anchor-MSC for this VGC, the Anchor-MSC itself forward the SM to all base station subsystems BSS partaking in the VGC and in addition to all Relay-MSCs, the Relay-MSCs send the SM to all respective BSS for this VGC, which transmit it to the listeners.

10. Method according to any of claims 1-9, characterized in that the current talker sends a SM via a SACCH of the respective uplink-channel on the resource controlling signalling connection control part SCCP to the MSC analogue to the sending of a PtP-SMS via the respective SACCH, where the destination of the SM can be either a MSISDN or a VGC-REFERENCE.

11. Method according to any of claims 1-10, characterized in that by using the MSISDN the SM is forwarded to the SC and there it is handled according to normal PtP-SM.

12. Method according to any of claims 1-11, characterized in that by using the VGC-Reference the SM is handled as accordingly the described procedures.

13. Mobile communication system with at least one logical unit for controlling signal exchange between the members of a Voice Call Group and with additional functional processing means for transmitting text- and/or binary information to one or more users of the Voice Group.

14. Mobile communication system according to claim 13, characterized in hat the text- and/or binary information is a short message SM.